

**Exhibit A**

**Clean Version of The Pending Claims in U.S. Patent Application Ser. No. 09/714,882**

1.(previously amended) An isolated nucleic acid molecule comprising the nucleotide sequence shown in SEQ ID NO:1.

2.(previously amended) An isolated nucleic acid molecule comprising a nucleotide sequence that encodes the amino acid sequence shown in SEQ ID NO:2.

3.(original) An isolated nucleic acid molecule comprising a nucleotide sequence that encodes the amino acid sequence shown in SEQ ID NO:4.

4.(original) An isolated nucleic acid molecule comprising a nucleotide sequence that encodes the amino acid sequence shown in SEQ ID NO:6.

5.(original) An isolated nucleic acid molecule comprising a nucleotide sequence that encodes the amino acid sequence shown in SEQ ID NO:8.

6. (original) An isolated nucleic acid molecule comprising a nucleotide sequence that encodes the amino acid sequence shown in SEQ ID NO:10.

7.(previously added) An expression vector comprising a nucleic acid sequence of Claim 2.

8.(previously added) A cell comprising the expression vector of Claim 7.

**Exhibit B**

**Clean version of title in**  
**U.S. Patent Application Ser. No. 09/714,882**

Human *Notch* Ligand Proteins and Polynucleotides Encoding the Same

**Exhibit C**

**Marked-up version of title in**  
**U.S. Patent Application Ser. No. 09/714,882**

[Novel] Human *Notch* Ligand Proteins and Polynucleotides Encoding the Same

**Exhibit D**  
**BLAST result of SEQ ID NO:1 versus human genome**

MEGABLAST 1.2.3-Paracel [2001-11-20]

**Reference:**

Zheng Zhang, Scott Schwartz, Lukas Wagner, and Webb Miller (2000),  
"A greedy algorithm for aligning DNA sequences",  
J Comput Biol 2000; 7(1-2):203-14.  
Database: Homo\_sapiens.latestgp.masked.fa  
33,840 sequences; 200,810,911,373 total letters

Query= LEX91seqid1  
(2070 letters)

Sequences producing significant alignments:	Score bits)	E Value
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AL109657.8.1.100272	349	4e-93
AL117333.26.1.156813	339	4e-90

>AL109657.8.1.100272  
Length = 100272

Score = 349 bits (176), Expect = 4e-93  
Identities = 176/176 (100%)  
Strand = Plus / Minus

Query: 1644 aggcaatgcatttgctagagtaaaaattggagattaccattactatggctatgggactaa  
1703

|||||  
Sbjct: 68087 aggcaatgcatttgctagagtaaaaattggagattaccattactatggctatgggactaa  
68028

Query: 1704 gaaagactatcaaacagcagccacacactacagcattgcagccaacaaataccacaacgc  
1763

|||||  
Sbjct: 68027 gaaagactatcaaacagcagccacacactacagcattgcagccaacaaataccacaacgc  
67968

Query: 1764 gcaagccatgttcaatctggcttatatgtatgaacacggcttaggcatacacaagg 1819

|||||  
Sbjct: 67967 gcaagccatgttcaatctggcttatatgtatgaacacggcttaggcatacacaagg 67912

Score = 333 bits (168), Expect = 2e-88  
Identities = 168/168 (100%)  
Strand = Plus / Minus

Query: 1403 agctttataaaggtgtctgtgaactaggccactgggctgagaaattcctgacagcttact 1462

|||||  
Sbjct: 74167 agctttataaaggtgtctgtgaactaggccactgggctgagaaattcctgacagcttact 74108

Query: 1463 ttgcctataaggatggtgatatagattcttctcttgttcagtatgcactgcttgcagaaa 1522

|||||  
Sbjct: 74107 ttgcctataaggatggtgatatagattcttctcttgttcagtatgcactgcttgcagaaa 74048

Query: 1523 tgggggtatgaagtagctcaaagcaattcagcattcattttggaatcta 1570

|||||  
Sbjct: 74047 tgggggtatgaagtagctcaaagcaattcagcattcattttggaatcta 74000

Score = 311 bits (157), Expect = 9e-82  
Identities = 157/157 (100%)  
Strand = Plus / Minus

Query: 746 ttgctgacacatttgaaaaaagtgaaggtgttccagtggaaaaagtgagactaacggaaa 805

|||||  
Sbjct: 95093 ttgctgacacatttgaaaaaagtgaaggtgttccagtggaaaaagtgagactaacggaaa 95034

Query: 806 gacctgaaaatctgagttctaacagtgagattttggattgggacatataccaataactata 865

|||||  
Sbjct: 95033 gacctgaaaatctgagttctaacagtgagattttggattgggacatataccaataactata 94974

Query: 866 aatttttggcagaaagaggagatgttcagatacaagt 902

|||||  
Sbjct: 94973 aatttttggcagaaagaggagatgttcagatacaagt 94937

+

Score = 288 bits (145), Expect = 1e-74  
Identities = 148/149 (99%)  
Strand = Plus / Minus

Query: 1256 ctggctctggaatatggaaggattataaacttgccttcaaataatttttacctggcatctc 1315

|||||  
Sbjct: 75501 ctggctctggaatatggaaggattataaacttgccttcaaataatttttacctggcatctc 75442

Query: 1316 agagtgggcagcccctcgccatttattatctggccaagatgtatgcaacaggaacaggag 1375

Sbjct: 75441 ||||| agagtgggcagccccttgccatttattatctggccaagatgtatgcaacaggaacaggag  
75382

Query: 1376 tagtaagatcatgcagaactgctgtggag 1404

Sbjct: 75381 ||||| tagtaagatcatgcagaactgctgtggag 75353

Score = 260 bits (131), Expect = 3e-66  
Identities = 131/131 (100%)  
Strand = Plus / Minus

Query: 1817 aggacattcacttggccagaagattgtacgacatggctgctcaaacgagtccagatgccc  
1876

Sbjct: 58972 ||||| aggacattcacttggccagaagattgtacgacatggctgctcaaacgagtccagatgccc  
58913

Query: 1877 acatacctgtgctctttgccgtcatgaaactggaaactacgcatttgctccgggatatcc  
1936

Sbjct: 58912 ||||| acatacctgtgctctttgccgtcatgaaactggaaactacgcatttgctccgggatatcc  
58853

Query: 1937 tgttttttaat 1947

Sbjct: 58852 ||||| tgttttttaat 58842

Score = 244 bits (123), Expect = 2e-61  
Identities = 123/123 (100%)  
Strand = Plus / Minus

Query: 1948 cagttcacaacgagatggaactggctgaaactggacaacaccattggaccacactgggac  
2007

Sbjct: 58258 ||||| cagttcacaacgagatggaactggctgaaactggacaacaccattggaccacactgggac  
58199

Query: 2008 ttatttgtgattggcctcattgttcctgggctgattttgttgcttagaaatcaccatggg  
2067

Sbjct: 58198 ||||| ttatttgtgattggcctcattgttcctgggctgattttgttgcttagaaatcaccatggg  
58139

Query: 2068 tag 2070  
|||

Sbjct: 58138 tag 58136

Score = 173 bits (87), Expect = 5e-40  
Identities = 88/89 (98%)  
Strand = Plus / Minus

Query: 1167 gaattatgccraagcacttaaatactttcagaaagctgcggaaaaagggaggccccgacgc  
1226

|||||  
Sbjct: 78242 gaattatgccgaagcacttaaatactttcagaaagctgcggaaaaagggaggccccgacgc  
78183

Query: 1227 acagttccagttaggcttcatgtactact 1255

|||||  
Sbjct: 78182 acagttccagttaggcttcatgtactact 78154

Score = 165 bits (83), Expect = 1e-37  
Identities = 87/88 (98%), Gaps = 1/88 (1%)  
Strand = Plus / Minus

Query: 659 tttt-ggggtacagatatttgtcgggaatcaatgttctacagaattgtgaagttgcccta 717

|||||  
Sbjct: 96507 ttttaggggtacagatatttgtcgggaatcaatgttctacagaattgtgaagttgcccta  
96448

Query: 718 agttattacaagaaagtggcagattata 745

|||||  
Sbjct: 96447 agttattacaagaaagtggcagattata 96420

Score = 161 bits (81), Expect = 2e-36  
Identities = 81/81 (100%)  
Strand = Plus / Minus

Query: 1025 agatgtatntagaggggaatgctgccgtgccgcaaaataacgctactgccttcaagtact  
1084

|||||  
Sbjct: 84768 agatgtatntagaggggaatgctgccgtgccgcaaaataacgctactgccttcaagtact  
84709

Query: 1085 tttccatggcagccagtaagg 1105

|||||  
Sbjct: 84708 tttccatggcagccagtaagg 84688

Score = 151 bits (76), Expect = 2e-33  
Identities = 76/76 (100%)  
Strand = Plus / Minus

Query: 1571 aaaaggctaacattcttgaaaaagagaagatgtatccaatggcgcttctcctatggaatc  
1630  
Sbjct: 73892 aaaaggctaacattcttgaaaaagagaagatgtatccaatggcgcttctcctatggaatc  
73833

Query: 1631 gagctgccattcaagg 1646  
Sbjct: 73832 gagctgccattcaagg 73817

Score = 137 bits (69), Expect = 3e-29  
Identities = 69/69 (100%)  
Strand = Plus / Minus

Query: 958 aaagcattacactacttcttaaaggcagcaaaggccgggagtgcaaatgccatggcattt  
1017  
Sbjct: 86239 aaagcattacactacttcttaaaggcagcaaaggccgggagtgcaaatgccatggcattt  
86180

Query: 1018 ataggaaag 1026  
Sbjct: 86179 ataggaaag 86171

Score = 129 bits (65), Expect = 7e-27  
Identities = 65/65 (100%)  
Strand = Plus / Minus

Query: 1103 agggcaatgcaatcggccttcattgggcttgggtcttctttactttcatggaaaaggagttc  
1162  
Sbjct: 78856 agggcaatgcaatcggccttcattgggcttgggtcttctttactttcatggaaaaggagttc  
78797

Query: 1163 ccctg 1167  
Sbjct: 78796 ccctg 78792

Score = 125 bits (63), Expect = 1e-25  
Identities = 63/63 (100%)  
Strand = Plus / Minus



Query: 602 aggcactgatataattacacctttggaagtgctggaggaaacatgatgtcccagatgattt 661  
|||||  
Sbjct: 96654 aggcactgatataattacacctttggaagtgctggaggaaacatgatgtcccagatgattt  
96595

Query: 662 tgg 664  
|||  
Sbjct: 96594 tgg 96592

Score = 113 bits (57), Expect = 4e-22  
Identities = 57/57 (100%)  
Strand = Plus / Minus

Query: 901 gtctctcttggacaattacatctaattggcaggaaaggtctagatcaggattactac 957  
|||||  
Sbjct: 94054 gtctctcttggacaattacatctaattggcaggaaaggtctagatcaggattactac 93998

Score = 109 bits (55), Expect = 7e-21  
Identities = 55/55 (100%)  
Strand = Plus / Minus

Query: 550 gcattaggatTTTTgtcttcttatggaataggaatggaatatgatcaagctaagg 604  
|||||  
Sbjct: 97163 gcattaggatTTTTgtcttcttatggaataggaatggaatatgatcaagctaagg 97109

>AL117333.26.1.156813  
Length = 156813

Score = 339 bits (171), Expect = 4e-90  
Identities = 171/171 (100%)  
Strand = Plus / Minus

Query: 113 aggtatcagtgaacgaaatcaaacaatatttatcacacatattggaacaaagaacatcta 172  
|||||  
Sbjct: 28470 aggtatcagtgaacgaaatcaaacaatatttatcacacatattggaacaaagaacatcta  
28411

Query: 173 gtaatgtaatacaataaaagagaaaatctcctggagaaaaagaagaatcaacgtaaaataa 232  
|||||  
Sbjct: 28410 gtaatgtaatacaataaaagagaaaatctcctggagaaaaagaagaatcaacgtaaaataa  
28351

Query: 233 gaataaaaggaattcaaaataaagatatcttgaagagaaataagaatcatt 283

Sbjct: 28350 ||||| gaataaaaggaattcaaaataaagatatcttgaagagaaataagaatcatt 28300

Score = 325 bits (164), Expect = 6e-86  
Identities = 164/164 (100%)  
Strand = Plus / Minus

Query: 387 agcctacctactttttgccaaagcagctgacatgggaaacttgaaagctatggagaaaat 446  
Sbjct: 10641 agcctacctactttttgccaaagcagctgacatgggaaacttgaaagctatggagaaaat 10582

Query: 447 ggctgacgcttttgctatttggaaattttggcgtgcaaaatataacagcagctatccaatt 506  
Sbjct: 10581 ggctgacgcttttgctatttggaaattttggcgtgcaaaatataacagcagctatccaatt 10522

Query: 507 atatgagtccttggctaaagaaggatcatgtaaagcccaaaacg 550  
Sbjct: 10521 atatgagtccttggctaaagaaggatcatgtaaagcccaaaacg 10478

Score = 204 bits (103), Expect = 2e-49  
Identities = 103/103 (100%)  
Strand = Plus / Minus

Query: 284 tacaaaagcaagcagagaaaaattttacagatgaaggagaccagctatttaagatgggca 343  
Sbjct: 15820 tacaaaagcaagcagagaaaaattttacagatgaaggagaccagctatttaagatgggca 15761

Query: 344 tcaaggttctccagcagtcctaaaagccaaaaacaaaaagaaga 386  
Sbjct: 15760 tcaaggttctccagcagtcctaaaagccaaaaacaaaaagaaga 15718

Score = 117 bits (59), Expect = 3e-23  
Identities = 59/59 (100%)  
Strand = Plus / Minus

Query: 59 ctatcaaagcagaggaacataataaaagacaaaaggaaagaatgtcaccacacaggta 117  
Sbjct: 52828 ctatcaaagcagaggaacataataaaagacaaaaggaaagaatgtcaccacacaggta 52770

Score = 115 bits (58), Expect = 1e-22  
Identities = 58/58 (100%)  
Strand = Plus / Minus

Query: 1 atgaagcccttgtctctgttaatagagatattgataattcttgggggcacaattaaaa 58  
|||||  
Sbjct: 87231 atgaagcccttgtctctgttaatagagatattgataattcttgggggcacaattaaaa 87174